



**BACHELOR of SCIENCE in PHYSICS (#754)**  
 Department of Physics and Astronomy  
 Ogden College of Science and Engineering  
 Western Kentucky University

The suggested program of study shown below should be used in consultation with your advisor(s). Every student will finish with a unique plan of his/her own depending on the electives selected.

**SAMPLE - 4 Year Plan**

FIRST YEAR	Fall Semester		Spring Semester	
	PHYS 180 & 181 – Introductory Modern Physics (with a Lab)	4	PHYS 255 & 256 – University Physics I (with a Lab) (E-NS, LS)	5
MATH 136 – Calculus I (F-QR)	4	MATH 137 – Calculus II	4	
ENG 100 Intro to College Writing (F-W1)	3	CHEM 120 & 121 – College Chemistry (with a Lab) (E-NS)	5	
COMM 145 Fundamentals of Public Speaking (F-OC)	3	HIST 101 World History I OR HIST 102 World History II (F-SB)	3	
<b>TOTAL CREDIT HOURS</b>	<b>14</b>	<b>TOTAL CREDIT HOURS</b>	<b>17</b>	

SECOND YEAR	Fall Semester		Spring Semester	
	PHYS 265 & 266 – University Physics II (with a Lab)	5	PHYS 321 – Introductory Modern Physics II	3
MATH 237 – Multivariable Calculus	4	PHYS 301 – Electrical Measurements Laboratory	1	
Arts and Humanities (E-AH)	3	ENG 300 Writing in the Disciplines (F-W2)	3	
ENG 200 Intro to Literature (F-AH)	3	MATH 307 – Intro to Linear Algebra OR MATH 370 – Applied Techniques in Mathematics	3	
		World Language, if needed, OR General Elective	3	
<b>TOTAL CREDIT HOURS</b>	<b>15</b>	<b>TOTAL CREDIT HOURS</b>	<b>13</b>	

**World Language Proficiency:** All students entering in Fall 2014 or later must demonstrate proficiency in a world language at the Novice High level before completing 60 credit hours. Novice high is the ability to communicate in writing and speaking on familiar topics in simple sentences. To meet this requirement, students may take college language courses or take a proficiency test. For more information go to [www.wku.edu/modernlanguages/placement/](http://www.wku.edu/modernlanguages/placement/).

**Colonnade Plan:** All students entering in fall 2014 or later must complete 39 hours in 13 specific Colonnade areas. Colonnade areas are listed in parentheses marked in blue after the corresponding classes. Some areas may have specific course requirements while others can be chosen from selected lists of options. For more details and to see lists of options, go to [http://www.wku.edu/colonnade/documents/approved\\_colonnade\\_courses\\_website.pdf](http://www.wku.edu/colonnade/documents/approved_colonnade_courses_website.pdf)

THIRD YEAR	Fall Semester		Spring Semester	
	PHYS 350 – Classical Mechanics I	3	PHYS 440 – Electricity and Magnetism	3
General Elective (Rec: PHYS 441/404 – Optics) <b>OR</b> Minor Course	4	PHYS 316 – Computational Physics <b>OR</b> PHYS 318 – Data Acquisition Using Labview	3	
PHYS 302 – Atomic Physics Laboratory	1	PHYS 398 – Junior Seminar	.5	
MATH 331 – Differential Equations	3	Social & Behavioral Studies (E-SB)	3	
Connections: Social and Cultural (K-SC)	3	Connections: Local to Global Course (K-LG)	3	
Minor Course	3	Minor Course	3	
<b>TOTAL CREDIT HOURS</b>	<b>17</b>	<b>TOTAL CREDIT HOURS</b>	<b>15.5</b>	

FOURTH YEAR	Fall Semester		Spring Semester	
	Connections: Systems (K-SY)	3	General Elective (Rec: PHYS 330 – Thermodynamics) <b>OR</b> Minor Course	3
General Elective (Rec: PHYS 480 – Quantum Mechanics) <b>OR</b> Minor Course	3	PHYS 3xx/4xx Elective	3	
General Elective (Rec: PHYS460/406 – Solid State) <b>OR</b> Minor Course	4	Minor Course	3	
PHYS 3xx/4xx Elective	3	Minor Course	3	
PHYS 498 – Senior Seminar	.5			
General Elective (Rec: PHYS 3xx/4xx) <b>OR</b> Minor Course	3			
<b>TOTAL CREDIT HOURS</b>	<b>16.5</b>	<b>TOTAL CREDIT HOURS</b>	<b>12</b>	
<b>Total Credit Hours: 120</b>				

**PLEASE NOTE:** Prerequisites, Course Numbers, and Course Titles are subject to change.  
Consult your advisor each semester. Course Descriptions may be viewed at <http://www.wku.edu/catalog>

**For more Information:**

**Department:** Physics and Astronomy

**Website:** [www.wku.edu/physics](http://www.wku.edu/physics)

**Phone:** (270)745-4357

**Email:** [info@physics.wku.edu](mailto:info@physics.wku.edu)

**Course Descriptions:** <http://www.wku.edu/undergraduatecatalog/>